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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,274	01/30/2004	Charles Edward Bayha	41212-200409	4832

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EXAMINER

PIAZZA CORCORAN, GLADYS JOSEFINA

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/767,274

Applicant(s)

BAYHA ET AL.

Examiner

Gladys JP Corcoran

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-24 is/are pending in the application.
- 4a) Of the above claim(s) 3-10,23 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/20/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The reference cited as AT in the information disclosure statement filed February 20, 2004 is a duplicate of the reference cited under AP, therefore the AT citing has been crossed out.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 11-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claims 11 and 13 are unclear by reciting "a spacer, which separates and supports said at least two sheets of glass, and forms an enclosed space between said two sheets a layer of resin,". In particular it is unclear what the limitation of "a layer of resin" is. There is no description in the Specification for an additional layer of resin other than the liquid resin provided in the following step, therefore it is unclear what Applicant is referring to by the current claim limitation.
5. Claim 16 is unclear by reciting "wherein one of said sheets is plastic" while claim 13 from which claim 16 depends recites "said at least two sheets of glass" in line 7. It is unclear how one of the sheets can be plastic while both are glass. Clarification is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 11-16, 18, 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Langlands (US Patent No. 4,234,533).

Langlands discloses a method of providing an insulated glass structure comprising at least two sheets with at least one of the sheets made of glass (column 5, lines 48-49), a spacer which separates and supports at least two sheets of glass and forms an enclosed space between said two sheets (tape; column 5, lines 49-51), accessing the space for providing a liquid resin formulation on a surface of glass defining the space (column 5, lines 55-57), the resin is liquid prior to cure, and curing said resin (column 5, line 58 to column 6, line 12; see also embodiment of column 6, lines 28-31).

As to claims 12 and 14, Langlands discloses sealing the spacer (the tapes are sealed to the glass sheets). As to claim 15, Langlands discloses that the resin is polyester and acrylate (column 3, lines 35 to 68). As to claim 16, Langlands discloses that one of the sheets is plastic (column 3, lines 7-14). As to claim 18, Langlands discloses the claimed reagents (column 3, lines 35 to 68). As to claims 20-22, Langlands discloses the claimed components for forming the resin (column 3, lines 35 to 68).

As to claim 17, the polyurethane resin is formed from known components/isocyanates for forming polyurethane. As to claim 18, the claimed reagents of polyols are well known for forming resins such as polyurethane and polyester. As to claims 19-21, the components claimed for forming polyester are considered well known and conventional. As to claim 22, the components claimed for forming the acrylate resin are considered well known and conventional.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 12, 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Langlands (US Patent No. 4,234,533) as applied to claims 11, 13 above, and further in view of Bayer (US Patent No. 4,299,639).

It is considered well known in the art to seal spacers from insulated glass structures in order to provide a structure that is completely sealed. For example, Bayer discloses sealing spacers between such structures (column 2, lines 46-62). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method as shown in Langlands with the step of sealing the spacer as is considered well known in the art in order to provide a complete seal around the glass structure as further exemplified by Bayer, only the expected results would be attained.

11. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Langlands (US Patent No. 4,234,533) as applied to claims 11, 13 above, and further in view of Bayha et al. (US Patent No. 5,318,853).

As to claim 16, as noted above such claim is unclear as to the structure of the insulated glass (whether it is two glass sheets, one glass sheet with one plastic sheet or something else). It is noted that Langlands discloses the sheets may be formed from glass or plastic (column 3, lines 7-14). Regardless, it is considered well known in the art to provide such sheets in the glass structure art of just glass, glass with plastic, or laminates of glass and plastic. For example, Bayha discloses it is known in the art to form such structures from glass, plastic or combinations of such (column 6, lines 24-33). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of forming a glass structure as shown in Langlands with one of the sheets as a resin sheet since Langlands discloses that the sheet may be formed from plastic sheets and since it is well known in the art to form such structures from sheets of glass, plastic, or combinations as exemplified by Bayha.

Art Unit: 1733

12. Claims 15, 17, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langlands (US Patent No. 4,234,533) as applied to claims 11, 13 above, and further in view of Wismer et al. (US Patent No. 3,509,015) and/or Delmonte et al. (US Patent No. 3,703,425).

Langlands discloses using any known polymers for the liquid resin (column 3, lines 34-47). It is considered well known in the art to use polyurethane resins for the liquid resins between glass sheets in glass structures. For example, both Wismer and/or Delmonte disclose known polyurethane adhesives for bonding sheets in glass structures. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide known resins in the method as shown by Langlands for bonding the two sheets including polyurethane resin as is considered well known and conventional in the art, and further exemplified by Wismer and/or Delmonte.

As to claims 17 and 18, the polyurethane resin in Wismer and/or Delmonte is formed from the claimed components/isocyanates and reagents of polyols for forming polyurethane. Such components and reagents are considered conventional for forming polyurethanes and it would have been well within the purview of one of ordinary skill in the art to use such conventional components as reagents.

13. Claims 15, 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langlands (US Patent No. 4,234,533) as applied to claims 11, 13 above, and further in view of Park et al. (US Patent No. 3,334,008) and/or Bayha et al. (US Patent No. 5,318,853).

Langlands discloses using any known polymers for the liquid resin including polyester (column 3, lines 34-47). It is considered well known in the art to use polyester resins formed from a variety of known components for the liquid resins between glass sheets in glass structures. For example, both Park and/or Bayha disclose known polyester adhesives for bonding sheets in glass structures. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide known resins in the method as shown by Langlands for bonding the two sheets including polyester resin as is considered well known and conventional in the art, and further exemplified by Park and/or Bayha.

As to claim 18-21, the polyester resin in Park and/or Bayha is formed from the claimed components and reagents of polyols for forming polyester. Such components and reagents are considered conventional for forming polyesters and it would have been well within the purview of one of ordinary skill in the art to use such conventional components as reagents.

14. Claims 15, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langlands (US Patent No. 4,234,533) as applied to claims 11, 13 above, and further in view of Triebel et al. (US Patent No. 4,125,669).

Langlands discloses using any known polymers for the liquid resin including acrylic (column 3, lines 34-47). It is considered well known in the art to use acrylic resins formed from a variety of known components for the liquid resins between glass sheets in glass structures. For example, Triebel discloses known acrylic adhesives for bonding sheets in glass structures. It would have been obvious to one of ordinary skill

Art Unit: 1733

in the art at the time of the invention to provide known resins in the method as shown by Langlands for bonding the two sheets including acrylic resin as is considered well known and conventional in the art, and further exemplified by Triebel.

As to claim 22, the components claimed for forming the acrylate resin are considered well known and conventional and are disclosed by Triebel. Such components and reagents are considered conventional for forming acrylics and it would have been well within the purview of one of ordinary skill in the art to use such conventional components as reagents


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gladys JP Corcoran whose telephone number is (571) 272-1214. The examiner can normally be reached on M-F 8am-5:30pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gladys JP Corcoran
Primary Examiner
Art Unit 1733

GJPC